Spill Scene Special Issue

1997 Annual Report

Spill Prevention, Preparedness and Response Program

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Letter from the Program Manager

As a long-time Ecology employee, I am very excited about the mission of the Spill Prevention, Preparedness and Response Program and about my selection as Program Manager. During 1997, we began a new chapter in our work to protect the environment through spill prevention and to ensure capable response on land and on water.

We successfully merged two separate agencies, and continued to emphasize preventing oil spills through education, planning, and vessel inspection programs. We began work on a new initiative to better protect the North Puget Sound area. We completed the first cycle of drills testing the capability of facilities to respond immediately to spills, conducted an evaluation survey, and began using the results to improve the drill process. We continued our strong response capability and worked with agencies and industry to embed the Incident Command Structure into the response system. We worked with the Northwest Area Committee to improve the contingency plan and make it more usable. And we weathered another year of increased activity responding to clandestine drug labs.

On the administration side, our budget structure stabilized somewhat. We are still monitoring the shift in funding resources that provides more support for program activities. We began working to bring the public closer to our decision-making process and to improve our relations with all our stakeholders.

These transitions, new initiatives and continued efforts will ensure we bring a strong program into the future. I am proud to be part of this effort.

Joe Stohr
Program Manager

Introduction

This annual report summarizes the 1997 activities of the Department of Ecology's Spills Prevention, Preparedness and Response Program (Spills Program). The Spills Program is dedicated to protecting human health and the environment from the threat posed by oil and hazardous substance spills to Washington's land and waters.

Program Overview

In 1991, the Washington State Legislature passed the Oil Spill Prevention and Response Act in response to the 1988 *Nestucca* oil barge spill in Grays Harbor County and the 1989 Exxon *Valdez* oil spill in Alaska. The Act set the funding mechanism and full mandate for the state's spill program. It greatly increased state involvement in oil spill prevention, preparedness, and response activities. Initially, oil spill prevention activities were split between the state Office of Marine Safety (OMS), to oversee marine vessel safety and spill prevention activities, and the Department of Ecol-

Continued on page 2

About this report

In ordinary years, the Spills Program issues it's annual report as a separate bound document. But 1997 was no ordinary year. This summary report in newsletter format provides basic information, but not the level of detail normally carried in the annual report. The 1998 annual report, to be published in early spring, will return to the usual format and level of detail.

Program Overview cont.

ogy, to oversee spill prevention activities at state oil handling facilities (refineries, pipelines, etc.)

On July 1, 1997, OMS merged with Ecology to create the Spill Prevention, Preparedness, and Response Program within the agency. The new Ecology program is comprised of about 62 staff including spill responders, vessel inspectors, environmental planners, engineers, and other management and support staff. The Spills Program maintains vessel inspection field offices near the Seattle and Portland ports, and regional response offices in Bellevue, Olympia, Yakima, and Spokane.

1997 Program Highlights

Merger – The former Office of Marine Safety and the Department of Ecology's Spill Management Program merged to form the Spill Prevention, Preparedness and Response Program in Ecology. The Legislature mandated the merger to improve coordination, focus and efficiency for spill prevention and response on land and water. Merger activities included hiring a new Program Manager for the combined office, accommodating other staff changes, reworking several data systems, and moving personnel, equipment and computer systems into the Ecology headquarters building. Staff also began working on policies to consolidate and integrate facility and vessel prevention planning, and investigations and enforcement activities. A Merger Evaluation Advisory Committee was formed to study and report on the outcome of the merger.

INTERTANKO Lawsuit – INTERTANKO, an international association of independent tanker owners, filed suit to challenge Washington's right to protect its natural resources by regulating the operation and management of tankers while they are in Washington waters. The U.S. District Court for Western Washington ruled in favor of the state's right to regulate tanker operations and management. INTERTANKO appealed that decision to the Ninth Circuit Court.

North Puget Sound Risk Assessment – The U.S. Coast Guard released a draft of a report ("the Volpe Study") that recognized the substantial risks to sensitive ecosystems posed by shipping in North Puget Sound, risks that cannot be met by the International Tug of Opportunity System. The draft report brought to the forefront long-standing concerns about this issue. Spills staff began planning how to best undertake a full-scale risk assessment of this area, as a long-term, collaborative effort with the U.S. Department of Transportation.

In Situ Test Burn – Ecology and the In Situ Test Burn Advisory Committee determined that the proposed test burn and EIS should be tabled. Effort should be put instead into additional equipment deployment testing, air monitoring/modeling, and drills of the actions and decision-making needed for in situ burning to be used as a response tool in the event of an actual spill.

Drug Labs – The number of clandestine drug labs discovered in Washington increased dramatically, from 60 in 1995 to 203 in 1997. This placed more demand on program staff to respond to these situations, and on the program's funding to dispose of the hazardous materials found at drug labs.

Northwest Area Contingency Plan – The Northwest Area Contingency Plan Steering Committee began revising the area plan to reflect the Incident Command System format. This revision is expected to improve the usefulness of the document and bring it into conformity with U.S. Coast Guard guidance.

Coordination with Other Jurisdictions – The Spills Program continued to coordinate its efforts with other jurisdictions

through the States/BC Oil Spill Task Force, the Northwest Area Contingency Plan Steering Committee, the Pacific Northwest Oil Spill Public Affairs Group, the Pacific Oil Spill Prevention Education Team, and the National Governors' Association (model EPA/ state spill prevention and response).

1997 Prevention Activities

Vessels

During 1997, staff saw a slight dip in activity mid-year due to the unavoidable disruption of the merger, but vessel monitoring, screening, and inspecting efforts were soon back to pre-merger levels. In fact, the number of inspections increased by the end of the year to higher than pre-merger levels.

There were 7,905 entering transits of Washington waters in 1997. Entering transits have averaged 7,976 over the past five years. There were 119 incidents reported in 1997. This is higher than the 78 incidents reported in 1996. The increase may be due to new reporting requirements introduced in 1996, and increased reporting by Washington state ferries.

1997 Vessel Data	
Vessel[1] Entering Transits	7,905
Incidents[2] Reported	119
Inspections	753
Citations Given	214
Cargo Vessels Screened	2,919
Screened Vessels of High/Very High Risk	1,627

[1]*Commercial cargo and passenger vessels, 300 gross tons and larger, and all oil tankers. Does not include tank barges and ferries.*
[2]*Spills and marine casualties (collision, loss of power, serious violation, etc.) for all vessels.*

Staff with maritime expertise investigate selected incidents, to learn how problems could be prevented and provide information for potential enforcement actions. A Safety Advisory Bulletin issued in 1997 instructed ship operators of the hazards and preferred procedures for anchoring in deep water.

An interesting trend that began developing by the end of 1997 was the higher rate of vessel inspections, coupled with a decreasing rate of enforcement actions. This trend seems to represent an increasing compliance with incident prevention requirements.

Planning

Facility operations manuals help oil handling facilities (refineries, pipelines, etc.) make sure they operate in a manner that provides

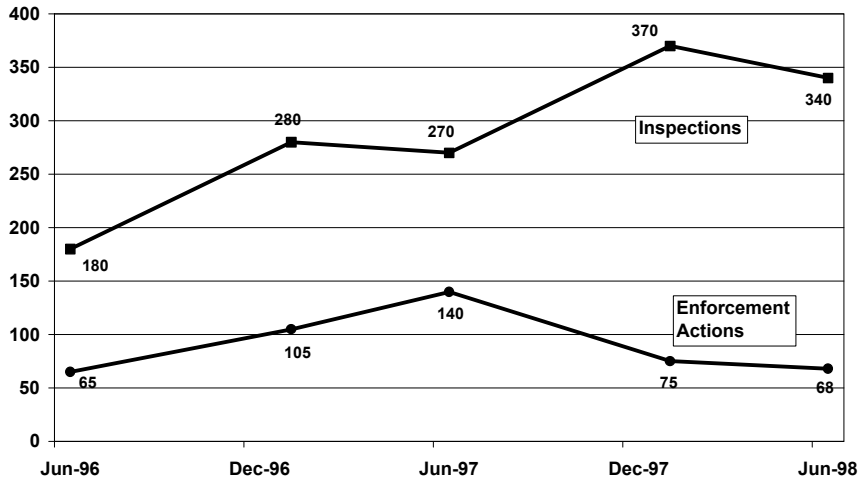
Prevention Overview

- **Vessel Screening** – Cargo and passenger vessels entering Washington waters are screened for potential environmental risks.
- **Vessel Boarding Program** – Inspections evaluate the operational performance of the ship and its crew.
- **Bunker Monitoring (Refueling)** – Bunkering inspections help reduce the frequency of bunkering spills.
- **Best Achievable Protection (BAP) Standards for Tankers** – Vessel owners submit spill prevention plans to Ecology to ensure that vessels apply BAP standards when operating in Washington waters.
- **Investigations** – Investigations of vessel events (marine casualties, oil spills, near miss incidents, etc.) help determine if prevention lessons can be learned.
- **Oil Handling Facilities** – Facility owners submit spill prevention plans to Ecology to ensure that facilities and pipelines apply BAP standards to keep spills from occurring.

Preparedness Overview

- **Oil Spill Drills & Contingency Plan Review** – Oil handling facilities, oil tankers and barges, and fishing, cargo and passenger vessels must have approved oil spill contingency plans to operate in Washington waters.
- **Geographic Response Plans (GRPs)** – GRPs identify and rank natural resource protection strategies for a particular region. This takes the guesswork out of the initial response during the first 12-24 hours.
- **Natural Resource Damage Assessments** – Assess damages to state natural resources caused by oil spills and recover restoration costs from the parties responsible for the spill.
- **Interagency Coordination** – Coordination between states and provinces along the West Coast ensures a consistent approach to spill prevention.
- **Education and Outreach** – Provide education and outreach to constituents through an array of activities.

Number of Inspections and Enforcement Actions 1997



the best achievable protection of public health and the environment. During 1997, Ecology staff completed the initial review of these manuals for 39 facilities. Staff made full reviews and approved the manuals for four of these facilities.

Companies operating oil tankers and tank barges in Washington waters are required to have vessel oil spill prevention plans meeting best achievable protection standards, and to operate according to those plans. Each company's plan can cover one or more vessels. During 1997, Ecology staff received 12 vessel prevention plans, reviewed 22 plans for compliance, and granted conditional approval for 15 plans. Those 15 plans covered 125 tankers and tank barges. Staff also made the first compliance check of an oil tanker covered by a conditionally approved plan.

1997 Preparedness Activities

Drills and exercises

Spill drills and exercises are vital components of Ecology's spill readiness efforts. During 1997, regulated oil-handling facilities throughout the state conducted numerous equipment deployment and tabletop drills to test the effectiveness of their response plans. Ecology participated in and evaluated 90 drills and provided recommendations on how oil-handling facilities can enhance spill-response readiness.

This year marked the end of the first three-year cycle for all oil handling facilities to complete their drill requirements. Generally, facilities have a much better idea now how they would organize and approach a major spill, and the "incident command system" for structuring a spill management team is now a common concept in nearly every facility.

Drill guidance

Staff conducted a detailed survey of oil-spill contingency plan holders, response contractors, consultants and others. The results were used to revise and improve the drill program and the guid-

ance manual for conducting drills. The drill evaluation checklist was redesigned to follow National Interagency Incident Management System principles.

Geographic response plans

Geographic response plans (GRPs) identify and rank natural resource protection strategies for a particular region. Having these strategies already in place when a spill happens helps make the initial response as effective as possible. In 1997, Ecology focused on maintaining and improving existing geographic response plans (GRPs). The agency also developed new GRPs for the lower Nisqually and the Spokane rivers.

1997 Response Activities

In 1997, the Spills Program received 3,232 spill reports and conducted 818 field responses. This map illustrates where the reported spills occurred, by county and by Ecology region. The percentage figures reflect each region's portion of the total reported

spills statewide.

Drug Labs

Of the 818 field responses conducted by Ecology staff, 203 were to clean up clandestine drug lab sites, primarily methamphetamine. This compares to 153 drug labs in 1996, and reflects an upward trend in clandestine drug lab activity statewide. In 1997, staff responded to drug lab sites in 21 of Washington's 39 counties. The counties with the highest numbers of labs were Thurston (63), Pierce (42), and Clark (20).

Drug lab responses take an inordinate share of Program resources, since they involve the cost of disposal as well as staff time. Since there is no mechanism outside of the standard budget process to increase funding to offset this increased response burden, spills staff began exploring ways to reduce these costs, especially disposal

Response Overview

- **24-Hour Statewide Response** – Ecology provides round-the-clock response to oil and hazardous material spills that pose a risk to public health and safety and the environment.
- **Compliance and Enforcement** – Once an oil spill occurs, Ecology can take a wide range of enforcement and compliance actions including administrative orders, field citations, penalties, and cost recovery of all response costs incurred by the state.
- **Cleanup Oversight** – As the state natural resource trustee during an oil spill, Ecology has oversight authority to ensure that the responsible party is acting responsibly to clean up the spill and to fully protect the environment.

Spill Reports by Type for 1997	
Type of Substances	**Number of Spills**
Petroleum products Gasoline, diesel fuel, crude oil, fuel oil, hydraulic oil, lubrication oil	1,733
Hazardous substances Pesticides, insecticides, batteries, paint, other toxics (anhydrous ammonia, hydrochloric acid, solvents, lithium, etc.)	628
Miscellaneous substances Wastewater, sewage sludge, garbage, dairy waste, algae	871

costs.

Confirmed Spills to Water

In 1997 there were 23 spills of 25 or more gallons of hazardous substances, including petroleum products, where the spill reached a water body or groundwater. The total volume spilled was 9,923 gallons. In 1996, there were 31 spills of this type, with a total volume spilled of 8,681 gallons.

25+ Gallon Spills to Water[1] for 1997		
	Number of Spills	**Gallons Spilled**
Covered Vessels[2]	2	130
Uncovered Vessels	10	1,125
Other[3]	11	8,668
Total	23	9,923

[1] *Water body or groundwater*
[2] *Vessels covered under state laws and regulations (all cargo and passenger vessels, 300 gross tons or larger)*
[3] *Pipelines, tanks, tank trucks, etc.*

Enforcement

In 1997, Ecology issued $41,500 in penalties and handed out two administrative orders for large oil spills. Oil spill field citations for moderate and small spills resulted in an additional $2,500 in penalties. This compares to the 1996 figures of $30,500 in penalties and two administrative orders for large oil spills, and an additional $6,000 in penalties issued through oil spill field cita-

tions.

The largest 1997 penalty was $20,000 issued to Tosco Refining Co. of Ferndale, for spilling 1,302 gallons of mixed heavy marine fuel oil and jet fuel into the Strait of Georgia in August. Ecology also issued Tosco an administrative order designed to prevent future spills, and requested that the company reimburse the agency $10,000 for its cleanup costs. Ecology also issued an administrative order and levied a $7,500 penalty against GATX in 1997 for a 49,000-gallon gasoline spill that occurred in December 1996, at the firm's Seattle tank farm facility. The largest volume spill to water in 1997 occurred when vandals released 5,550 gallons of asphalt product into a freshwater slough from a Cowlitz County Public Works site near Longview.

1997 Restoration Activities

Natural Resource Damage Assessments

In addition to penalties and cleanup expenses, those responsible for oil spills must also compensate Washington citizens for damage to public natural resources. Ecology coordinates the assessment of oil spill damages and oversees efforts to restore injured resources in cooperation with other state resource agencies.

During 1997, 24 spills occurred that triggered Natural Resource Damage Assessments totaling more than $175,000. Assessments may be collected during the year the spill occurs, or in later years. In 1997, more than $263,000 in assessments was collected. This money helped to fund nine restoration projects in 1997, including salmon passage and stream enhancement work on Newauxum, Beaver and Fry creeks, two spartina removal projects, beach cleanup on Hood Canal, a kelp survey for the Strait of Juan de Fuca and the outer coast, restoring wetlands near Arlington, and remediation and restoration projects in Port Townsend.

In one of the most significant natural resource damage assessment settlements of 1997, the owners of the cargo ship M/V Central agreed to pay $65,763 for a 3,000-gallon bunker fuel spill that occurred in Longview on June 3, 1993. Ecology had to hire an admiralty law firm to track down the vessel. The vessel owners agreed to pay a negotiated settlement after they were threatened with seizure of the ship in Australia.

The Tosco Refining Co. of Ferndale paid a $25,777 damage assessment for the August fuel spill into the Strait of Georgia. (See "Enforcement") Although Tosco deployed oil-skimming vessels to remove a large portion of the oil from the water, the spill traveled nearly 18 miles down Rosario Strait. Drifting mats of eelgrass and kelp, an important habitat for young fish and shellfish, were oiled by the spill. State fishery biologists estimate a large number of Dungeness crab larvae were present at the time and were probably affected by the spill.

The U.S. Navy also settled several natural resource damage assessments for an array of spills, some going back to 1993. Washington was reimbursed $38,000 for a 5,400-gallon jet fuel spill from the USS Camden that occurred on April 15, 1993, in Bremerton. In 1997, the state settled several other Navy spills totaling more than $30,000. Navy settlements usually take the form of in-kind restoration services (labor, equipment and supplies).

Spill Prevention, Preparedness, and Response Program
PO Box 47701
Olympia, WA 98504-7701

BULK RATE
U.S. POSTAGE PAID
Washington State
Department of
Printing

Ecology is an equal opportunity agency. If you have special accomodation needs, please contact the Spills Program at (360) 407-7455 (Voice) or (360) 407-6006 (TDD).

printed on recycled paper